

HOW DO I DEVELOP SCANNING SKILLS?

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What are we covering?

- Developing Scanning skills
 - Strategies to develop scanning skills
 - Preparation for use of other technologies



Let's get Practical!

- Think of a client you are working with
- As we move through the webinar, think of strategies that may be helpful

Determining Switch Site and Type

- Before developing switch skills, an optimal switch site and type are identified
- Positioning is key
- For more information on Switch Assessment, please refer to archived AbleNet webinars



Determining Switch Site and Type

- If switch skills are “stalling out”, a reassessment may be indicated to ensure optimal switch site and type
- The client who has plateaued may:
 - Be bored
 - Need a different switch placement
 - Need a different switch type
 - Have reached their potential
 - In children particularly, this can change
 - Follow-up is critical



Questions?

Scanning Skills: Scan Type

- Depends on the type of scanning
 - Automatic Scanning
 - Step Scanning
 - Inverse Scan
 - Not common

The screenshot displays a Windows On-Screen Keyboard interface. At the top, there are navigation icons (back, home, forward, search, chat) and system icons (volume, network, Wi-Fi). The main area is a grid of words and phrases, organized into columns. The first column contains the words 'head', 'heart', and 'health'. The second column contains 'I', 'you', 'he', 'a', 'where', 'what'. The third column contains 'me', 'your', 'she', 'that', 'who', 'when'. The fourth column contains 'my', 'it', 'him', 'the', 'why', 'how'. The fifth column contains 'we', 'they', 'her', 'this', 'Sentences', 'E-mail'. The sixth column contains 'I...', 'want', 'be', 'could', 'have', 'were'. The seventh column contains 'to', 'like', 'are', 'do', 'is', 'will'. The eighth column contains 'to', 'go', 'can', 'did', 'was', 'would'. Below the grid, there is a text input field containing the text 'Your hea'. At the bottom, there are several utility buttons: 'OnScreen Keyboards', 'AccessIT Comp Access', 'Tools & fun', 'yes', 'no', 'today', 'PEOPLE', 'PLACES', 'THINGS', 'ivematt', 'up', 'come', 'eat', 'drink', 'feel', 'day', 'now', 'time', 'today', 'with', 'about', 'again', 'there', 'by', 'get', 'give', 'help', 'know', 'good', 'more', 'much', 'okay', 'and', 'at', 'be-cause', 'but', 'if', 'make', 'need', 'put', 'say', 'really', 'right', 'so', 'very', 'down', 'for', 'from', 'here', 'only', 'take', 'talk', 'tell', 'think', 'please', 'thank you', 'hello', 'Chat On mode', 'in', 'of', 'off', 'on', 'turn', 'walk', 'watch', 'work', 'Spell Check', 'See you', 'power', 'source', 'or', 'out', 'over', and '004-FF-B4'.

Scanning Skills: Auto

- Automatic Scanning
 - One switch
 - First activation begins the scan
 - Second activation selects quadrant/block, row, column or individual selection
 - Linear
 - Row/column
 - Column/row
 - Quadrant
 - Multiple switch activations are required

linnear scanning example

A	B	C	D	E	F
G	H	I	J	K	L
M	N	O	P	Q	R
S	T	U	V	W	X
Y	Z	ENTER	SPACE	,	.

Row-column scanning example

A	B	C	D	E	F
G	H	I	J	K	L
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S	T	U	V	W	X
Y	Z	ENTER	SPACE	,	.

linear scanning example

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Scanning Skills: Auto

- Anticipation
- Waiting
- Activation
 - Timed, accurate
- Release



Scanning Skills: Auto

- Clinical indicators:
 - Less switch activations required than 2 switch
 - Fatigue
 - Motor control
 - May be easier to use with auditory scanning
 - For clients who cannot see display well
 - Can change scanning speed as client gains skills

Scanning Skills: Step

- Two switches
- First switch moves through possible selections
- Second switch selects the highlighted choice



I	School	Thomas
Walsey	to	go



Scanning Skills: Step

- Many switch activations required
- Repetition, endurance
- Waiting (particularly second switch)
- Activation
- Release



Scanning Skills: Step

- Clinical Indicators:
 - Works well for clients who struggle with anticipation
 - Anticipation can lead to anxiety, excitement, increased tone
 - Client may then 'miss' their desired selection and have to wait for the scan to come around again
 - 2 switch puts the control with the client
 - More difficult to use with auditory scanning
 - Many more switch hits required

Which Devices Use Scanning?

- AAC
- Computers
- Tablets
- EADLs



Developing Scanning Skills

- Strategies:
 - Basic EADLs
 - Computer Software
 - Apps

Basic EADLs

Basic EADLs

- Timed Mode
- Develops skills needed in Single Switch scanning:
 - Anticipation
 - Waiting
 - Timing



Basic EADLs

- Switch Latch and Timer
 - Connect to any battery operated device
 - Put in Timed mode
 - i.e. timed seconds, 10 seconds



Basic EADLs

- PowerLink 4
 - Connect to any simple electrical device
 - Put in Timed mode
 - i.e. timed seconds, 10 seconds



Basic EADLs

- Example:
 - Toby loves trains
 - Connect toy train set transformer to PowerLink
 - Connect switch, position at access site
 - Switch activation makes the train go



Basic EADLs

- Example:
 - Toby begins to anticipate that the train is going to stop
 - He has to wait for the train to stop
 - He has to activate the switch again to make it go
 - Developing timing and accuracy
 - He releases the switch after the train resumes movement



Questions?

Computer Software

Computer Software

- Some Single Switch Software programs are designed to train scanning skills
 - Particularly single switch scanning skills



Single Switch Software

- What is required?
 - Switch Interface
 - Switch
 - Software



Single Switch Software

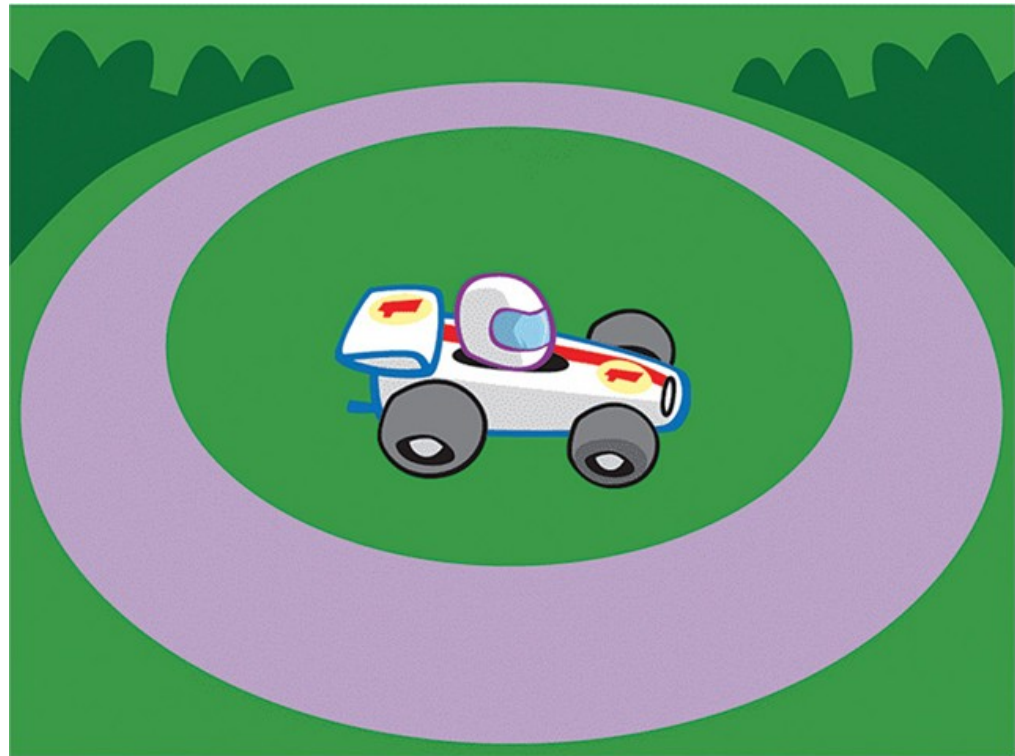
- Software
 - Cause and Effect software
 - This can be used to build switch skills
 - Motor, repetition, automaticity
 - Other programs work on scanning skills
 - Anticipation
 - Waiting
 - Timing and Accuracy

Inclusive TLC

- Software
 - On website:
 - Switch Accessible Software
 - Timing Software
 - Scanning Software
 - One Switch
 - Two Switch

Inclusive TLC

- Timing
 - Switch Skills 1
 - Works on timing, reaction time
 - Intro to switch scanning



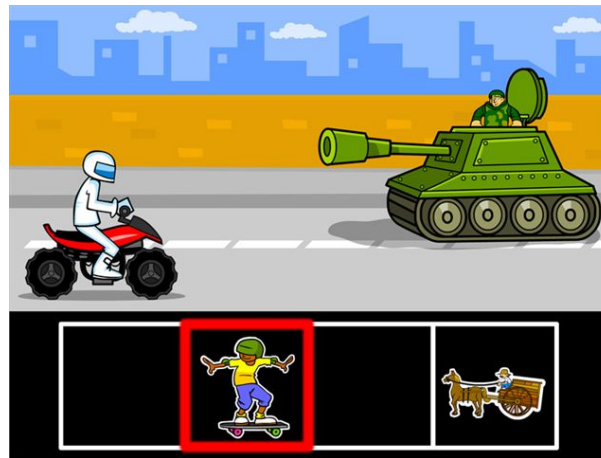
Inclusive TLC

- Timing
 - Super Switch Hitter (baseball)
 - Switch Lanes (bowling)
 - Switch Jam (music)
 - Easy Games (arcade style)



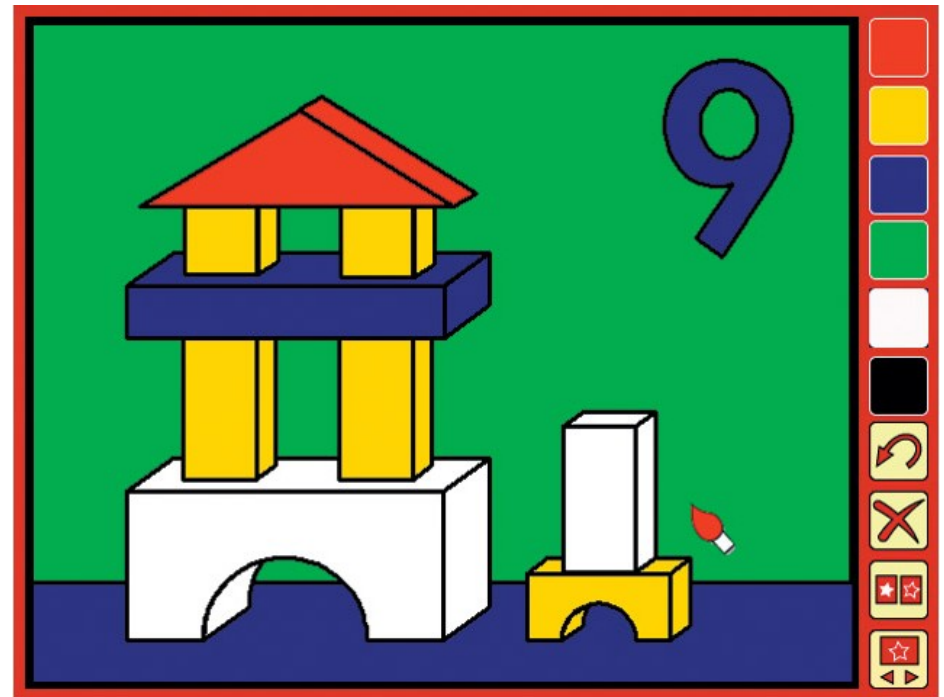
Inclusive TLC

- Timing
 - Switch Skills Scanning
 - 22 activities
 - 5 sections
 - Increasing levels of skill and complexity in very small steps



Inclusive TLC

- Scanning
 - This category can be used to continue to develop scanning skills, but this adds in other layers (i.e. academic) and so may not be appropriate for developing scanning skills



Inclusive TLC

- One Switch
- Two Switch
- These are programs that can be operated by one or two switches
- Other “layers” may be present, as opposed to a training program
- Great for reinforcement, variety



Single Switch Software

- Marblesoft
 - On website:
 - Desktop Software
 - Switch Training

Marblesoft

- Frog and Fly
 - Cause and Effect
 - Auto Scanning
 - Two Switch Scanning



Marblesoft

- Scan and Match
- Auto scanning
- Step scanning



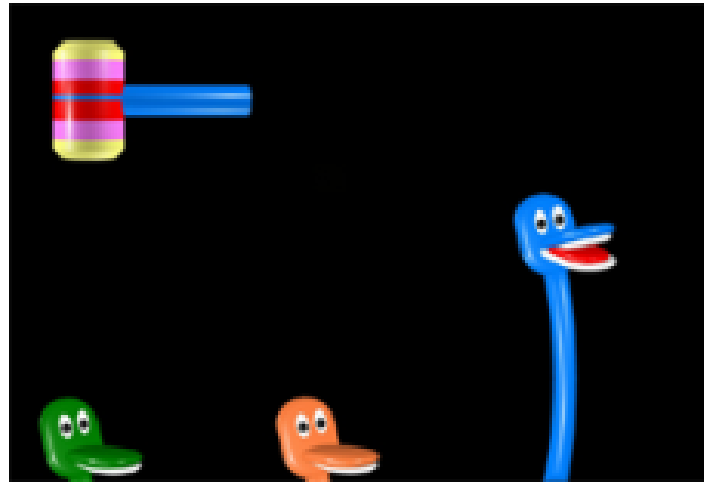
Marblesoft

- Switch Wars
 - Auto scan/linear scan
 - Step scanning
 - Reaction time



Marblesoft

- Two switch software
- “Learning Two Switch Step Scanning”
 - 21 activities



Questions?

Apps

Tablet Apps

- Instead of a computer, use a tablet!
- More and more Apps are available that can be controlled by a single switch
 - Can be used to work on the same skills as single switch software
- Advantages:
 - Many families have a tablet at home
 - Apps are typically inexpensive
- Disadvantages:
 - May need Bluetooth switch or adaptor

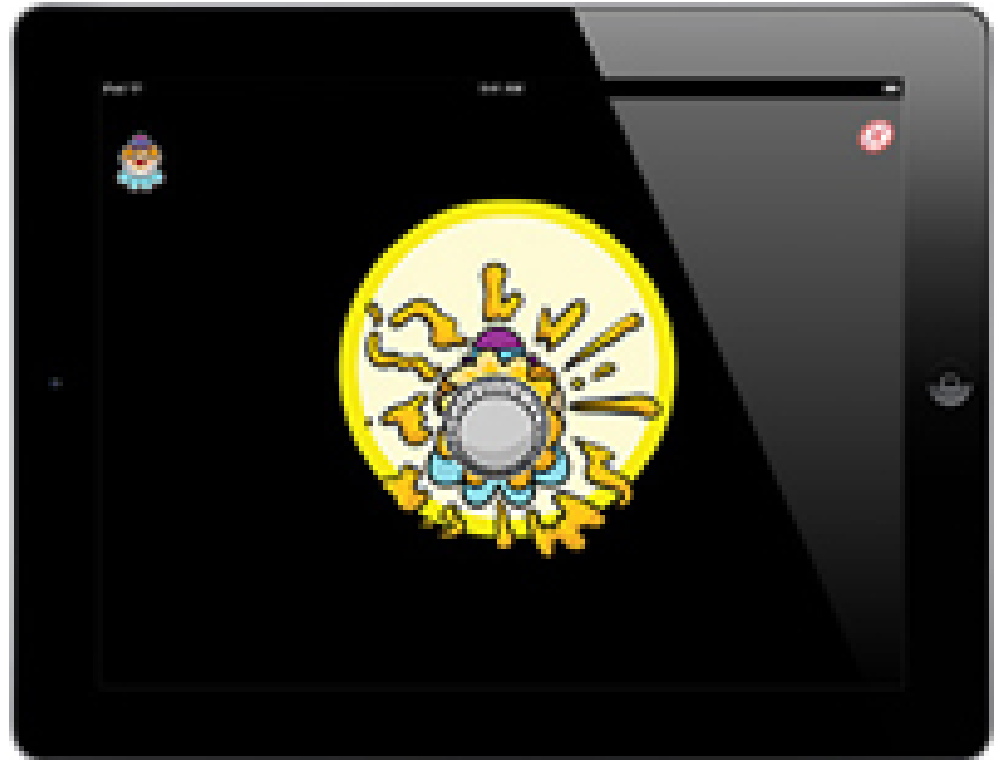


Inclusive TLC

- On website:
- iPad
 - Apps
 - Most are available for iOS and Android platforms

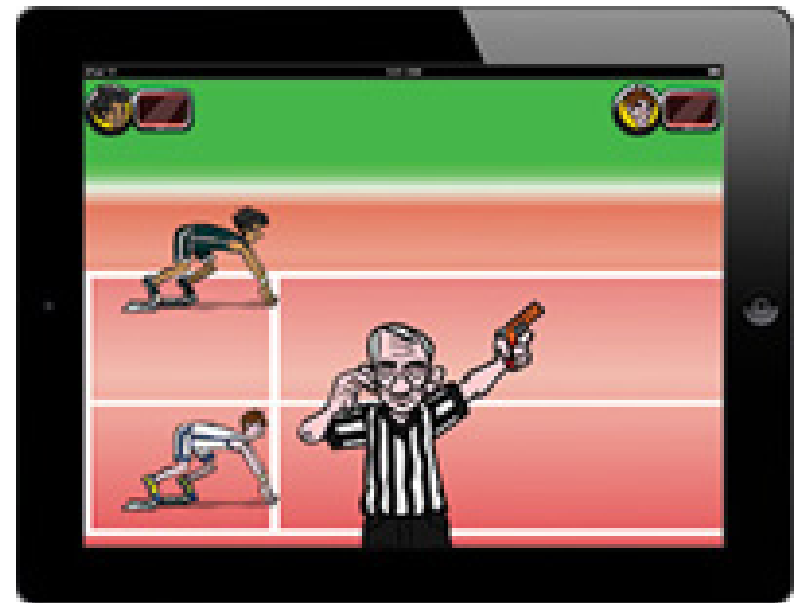
Inclusive TLC

- Splat the Clowns
 - Timing, reaction time
 - Wait for the clown to reach the target



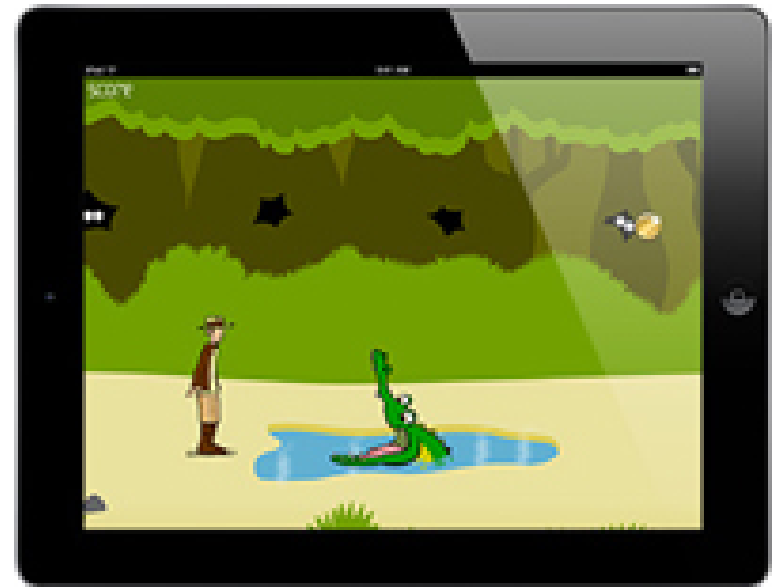
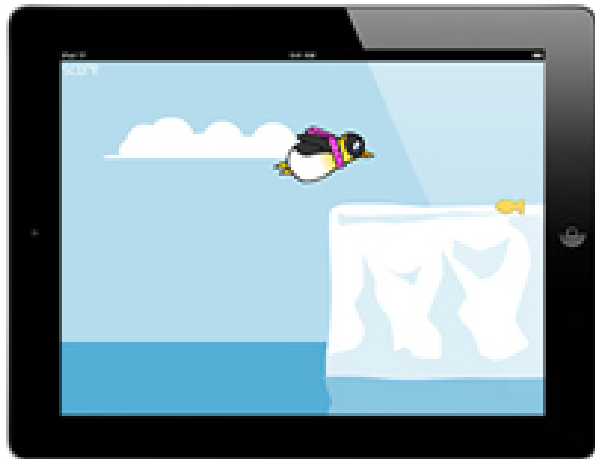
Inclusive TLC

- Hurdle Champion
- Develops switch and timing skills
- iOS and Android



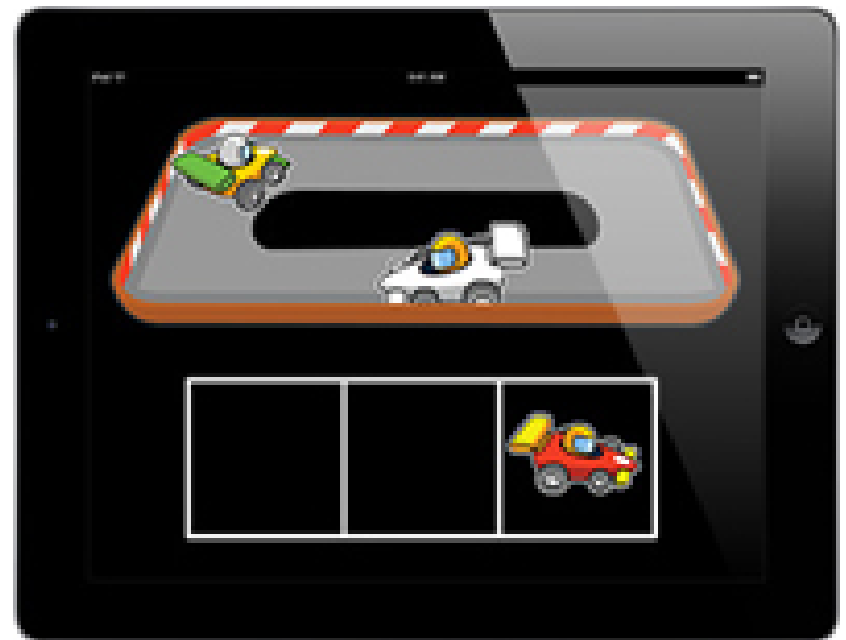
Inclusive TLC

- Jungle Adventure
- Little Lost Penguin
- Timing, anticipation
 - Watch and wait for the correct time to overcome obstacles



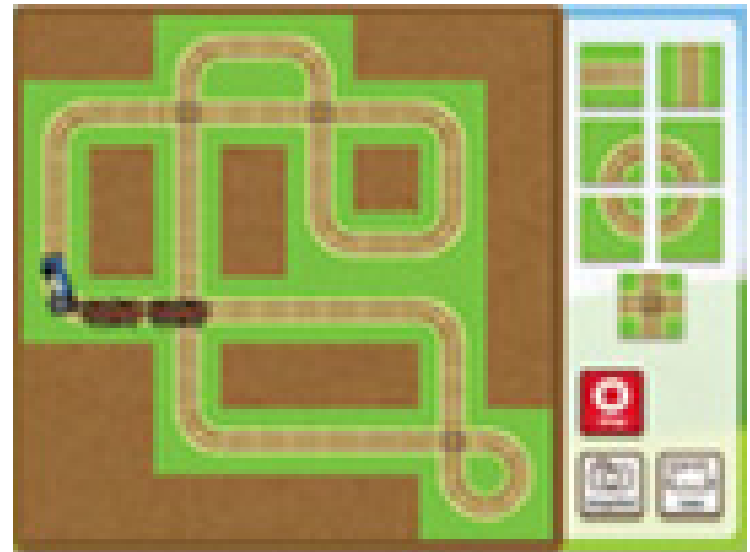
Inclusive TLC

- Racing Cars
 - One or two switch scanning
 - Developing scanning skills



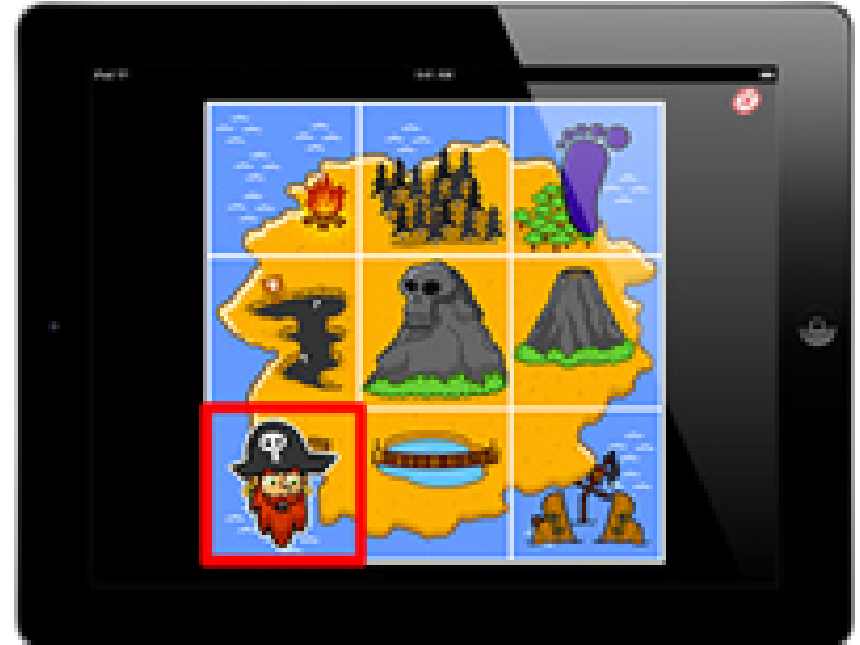
Inclusive TLC

- Train Tracker
- One or two switch scanning
- Build track, run train



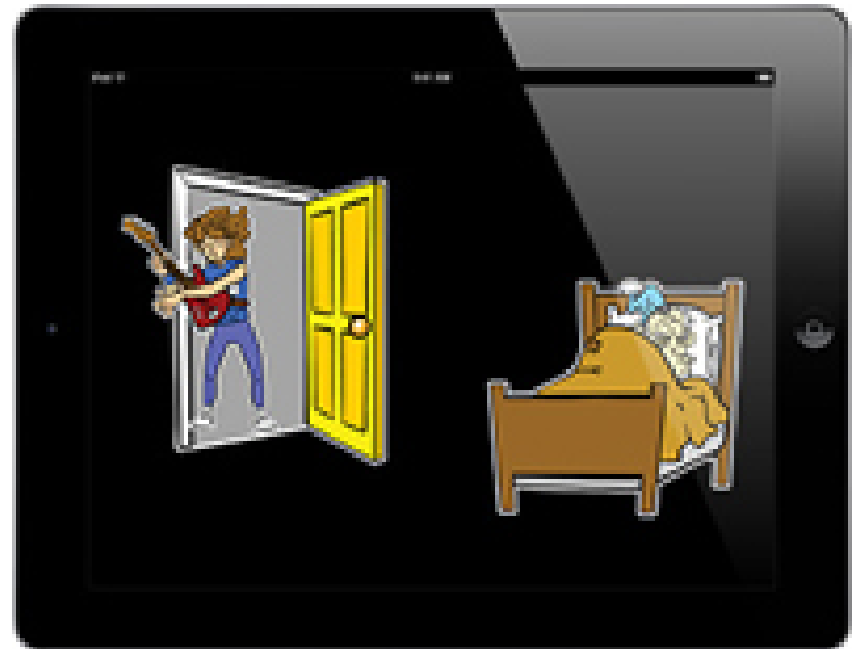
Inclusive TLC

- Treasure Island
- One or two switch scanning
- Works on scanning a grid



Inclusive TLC

- Developing 2 switch skills
- Shhhh!
- Each switch controls a different feature



Judy Lynn Software

- Step Scanning
 - iPad App
 - 8 lessons



LIFEtool Solutions

- SwitchTrainer
- Designed to train 1 to 2 switch use, including scanning



Marblesoft

- iPad Products
 - Apps
 - No longer on their website
 - Go to iTunes store
 - These are primarily Cause and Effect



Potato Face

Questions?

Take Home Message

- For some of our clients, step by step training is required to achieve a successful outcome
- This requires
 - Positioning
 - Finding the best switch location and type
 - Training basic switch skills
 - Training Switch Scanning skills
 - For application on AT requiring scanning

Let's get Practical!

- Remember that client you were thinking of?
- Did you think of any useful strategies to try?
- Write them down, give them a try and let me know how it works!

Activity Idea

- Purchase an inexpensive Switch Scanning Training App and try it out with a client!

Thank You!

Contact Information

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